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|  |  | Dec 3 – Jan 17 Fourth Period: 11:35 – 12:30 |
| Physical Science  Term 2A, 2012-2013 |  | Instructor: Sada Ganske E-Mail: sgansk@district16.org / sgansk@mypanthers.org Phone: 763-767-9286 Room: C265 Prep Hour: Period 5 |
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| Overview Physical Science in a general introduction to the inquiry process and the laws / theories of science. Standards Upon successful completion of this course, you will have addressed the following MN State Science Standards:   * Explain and calculate current, voltage and resistance, and describe energy transfers in simple electric circuits. * Describe how an electric current produces a magnetic force, and how this interaction is used in motors and electromagnets to produce mechanical energy. * Compare fission and fusion in terms of the reactants, the products and the conversion from matter into energy. *For example:* The fusion of hydrogen produces energy in the sun. *Another example:*  The use of chain reactions in nuclear reactors. * Describe the properties and uses of forms of electromagnetic radiation from radio frequencies through gamma radiation. *For example:* Compare the energy of microwaves and X-rays. * Compare local and global environmental and economic advantages and disadvantages of generating electricity using various sources or energy. *For example:* Fossil fuels, nuclear fission, wind, sun or tidal energy. * Describe the trade-offs involved when technological developments impact the way we use energy, natural resources, or synthetic materials. *For example:* Fluorescent light bulbs use less energy than incandescent lights, but contain toxic mercury. * Scientific inquiry uses multiple interrelated processes to investigate and explain the natural world (and corresponding MN state science benchmarks).  Behavior A successful science student is one who arrives to class *before* the bell, turns off his/her electronics during while the teacher is talking, is mentally present and is respectful of all nouns. Disturbing the learning atmosphere will not be tolerated. Evaluation You will be evaluated based up daily work, projects, labs, personal responsibility, discussions, tests and quizzes. Be aware that several labs can only be conducted on the days materials are provided; make up options will not be provided. |  | Most class materials will be listed at the course site: LACSscience.wikispaces.com**Attendance Policy:**  1. Arrive before the bell 2. Do NOT leave the first or last 10 minutes of the period 3. Get permission, sign out and sign back in upon your return 4. Leave one at a time 5. Leave no more than once per period  **Important Dates**  12/3 first day of the term  12/20 midterm  12/22/12-1/1/13 winter break  1/2 classes resume  1/17 early release / end of term   1. **Credit Eligibility**   This course is 0.5 credit; if you have a grade of B or better at the end of the term and complete 400 points of A/B quality additional course work *outside of class*, you may be eligible for 1.0 credit. The project list will be made available the end of the second week of the term. |
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